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ABSTRACT

Alternatives to the current system of graded classes and ability grouping are examined that would allow teachers to balance individual student needs with practical considerations in instructional delivery. In addition to reviewing the alternatives, the research that has examined these approaches is reviewed and synthesized. The three alternative grading practices reviewed are: (1) non-graded schools; (2) multigraded classrooms; and (3) the Joplin Plan, developed in Joplin (Missouri), as a system of instructional grouping within a graded school in which students are regrouped for instruction in a specific skill by ability without regard to grade level or age. Overall, research reviewed for this paper provides inconsistent support for the use of non-graded and multigraded classes over traditional practices. In contrast, the use of the Joplin Plan is well-supported by research. Although findings are inconclusive, no detrimental effects were attributed to any of the alternative plans. Suggestions for further research are given. There is a 28-item list of references. (SLD)

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ALTERNATIVE INSTRUCTIONAL GROUPING PRACTICES

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INTRODUCTION

For many years, the question of how to group students for instruction has been a concern of teachers and administrators. Traditionally, students in the United States' system of public education have been placed in graded classes essentially by age groups. However, given the range of skills, knowledge and learning rate of individual students within the same grade level, educators have needed to look for ways to regroup students for more effective instruction. Ability grouping, non-graded school organization plans and multigraded classes illustrate attempts of educators to improve the school's ability to meet the individual needs of students. Today, the controversy about grouping practices continues, as school restructuring efforts refocus the attention of educators on the efficacy of the traditional school organization.

HISTORY OF THE GRADED SCHOOL ORGANIZATION

The tradition of public education in the United States dates back to the colonial era. Early schools, such as the "dame" schools of the seventeenth century, were ungraded systems with small student populations. Instruction was highly individualized and student movement through the curriculum was based on the individual's rate of

achievement. By the mid-nineteenth century, a greater emphasis began to be placed on a more ordered approach to instruction. With record numbers of students entering the public education system, school districts began to implement plans for pupil classification. Grade "norms" were introduced as the expectations for curriculum and instruction began to be developed. By 1870, the present-day system of graded schools was firmly established (Goodlad and Anderson, 1959).

CURRENT PRACTICES

In many ways, little has changed since the establishment of the graded school structure in the mid-nineteenth century. Most schools continue to group students in a sequenced grade structure from kindergarten through twelfth grade. Within these grade classifications, educators must deal with a diverse population with significant differences in background, experiences, and skills.

Since the turn of the century, educators have attempted to reduce the effects of this diversity by organizing students into more homogeneous instructional groups on the basis of academic ability. Although there are many different applications of ability grouping, the following definition of ability grouping will be used in this report:

a system of instructional grouping in which students are grouped according to some measure of learning achievement or capability. The groups are generally formed on a yearly basis with limited opportunities for movement between groups. Although ability grouping has been a common practice for nearly a century, educators are now questioning the effectiveness of this practice (Weaver, 1989).

Those who support ability grouping argue that it allows high-achieving students to move rapidly through advanced material without being slowed down by poorer students. Low-achieving students can be instructed together to provide them with sufficient support and a slower pace of instruction. However, Slavin (1987a), in a review of research on ability grouping, concluded that grouping students by ability at the elementary level does not result in increased student performance for either high- or low-achieving students.

Proponents of ability grouping suggest that low-achieving students will be more comfortable in a school setting which removes them from competition with high-achieving students. Current research, however, indicates that the organization of groups by ability creates a social hierarchy within the school; those assigned to low-achieving groups may experience feelings of inferiority and self-doubt, while high-achieving students develop a

sense of superiority (Holloway, as cited by Levenson, 1979). Levenson (1979) found that ability grouping leads to stereotyped roles which prevent students from developing a positive self-concept and healthy social relations with their peers.

Assignment to instructional groups based on student ability is believed to provide a better match between student needs and the type of instruction provided. Many studies have shown that, rather than improving instruction for low-achieving students, ability grouping often leads to lower teacher expectations, poor peer models for behavior and achievement, and a lower overall quality of instruction (Maxwell, 1986; Slavin, 1987a; Weaver, 1990).

While ability grouping has attempted to address issues of student diversity, this type of grouping often fails to create groups which are truly homogeneous. Because groups are generally formed according to a single criterion, such as student performance in a given subject area, vast differences in other skill areas may still be evident. Overall, this plan has a limited impact on reducing student heterogeneity within the classroom (Slavin, 1987a).

Although ability grouping has been a common practice in American public education for nearly a century, it has been shown to have little effect on student achievement and a negative impact on student self-esteem. Further, it has not

been shown to have a significant impact on the ability of teachers to address individual differences in the classroom. At this time, there is no research evidence which supports the assignment of students to classes on the basis of achievement or ability. While ability grouping has been shown to be a questionable educational practice, educators continue to need methods of grouping which allow them to successfully address the needs of a diverse student population.

The problem may lie more within the structure of the graded school than within the concept of using some type of ability grouping to form effective instructional groups. The current graded school system, in which students are primarily classified by age, contributes to the difficulty in meeting individual needs by ignoring the developmental range of students at a given grade level (Kaufhold, 1981). Tyler (1985) suggests that the "lock-step" nature of the graded system is a significant factor in student failure in school; individual differences in learning rate and actual performance are largely ignored by teachers who are expected to use a single graded curriculum.

The purpose of this paper,then, is to examine alternatives to the current system of graded classes and ability grouping which allow teachers to balance individual needs with practical considerations in instructional

delivery. In addition to reviewing alternatives, the research which has been conducted examining these different approaches will be upgraded and synthesized.

CRITERIA FOR EFFECTIVE USE OF ABILITY GROUPING

Three alternative methods of grouping students for instruction will be examined. In each of the methods, a variation of ability grouping is used to address student heterogeneity in the classroom. According to Slavin (1987b), there are three criteria which must be satisfied if ability grouping is to reduce the heterogeneity of classroom groups and be instructionally effective:

> 1. The grouping plan must measurably reduce student heterogeneity in the specific skill being taught;
>
> 2. The plan must be flexible enough to allow teachers to respond to misassignments and changes in student performance level after initial placement; and
>
> 3. Teachers must actually vary their pace and level of instruction to correspond to students' levels of readiness and learning rates (p.322).

When instructional groupings are formed in which students are assigned to classes by their ability, the first two criteria are not met. First, students are grouped by gross measures of ability rather than by their ability

relative to the specific skill being taught. Second, once placed in a class or group, students are rarely regrouped regardless of changes in their academic performance (Maxwell, 1986).

In contrast, the alternative grouping practices examined in this paper are seen to meet the criteria presented. This report will present three alternative grouping practices currently in use in American public schools: nongraded schools, multigraded classes, and the Joplin Plan. For each alternative, a definition of the approach to forming instructional groups will be presented and current research examining the practice reviewed. Synthesis of the research findings and recommendations for their application will follow.

NONGRADED SCHOOLS

In some school districts, a nongraded approach to school organization has been implemented in order to allow teachers to form instructional groups without concern for traditional grade level designations. Many variations of nongraded programs exist, ranging from districts which eliminate grade level designations from entire schools to schools which have organized nongraded classes for a portion of the school population. In this report, the term "nongraded schools" refers to a system of instructional

grouping in which students are allowed to progress at their own rate of learning rather than being tied to the set curriculum of a given grade level. Students are placed in flexible groups by performance level, not age, and grade level designations are removed.

As early as 1964, Hillson, Jones, Moore, and Van Devender reported that many public elementary schools viewed non-graded organizations as a solution to many academic failures in the primary grades. Some of the benefits attributed to a non-graded system are:

1. Children progress at a rate appropriate to their abilities without a threat of failure.
2. Children and teachers have less anxiety and tension.
3. The instruction is adjusted to individual needs and developmental levels.
4. Children compete only with themselves.
5. The system does not require all children of the same age to perform at the same grade level.
6. Children make continuous progress by picking up each school year exactly where they left off.

Hillson et al. (1964) conducted a research project designed to assess the accuracy of these claims by evaluating the effects of a non-graded program on reading

achievement of elementary students. All first grade students entering Washington Elementary School were randomly assigned to an experimental or control group. These children remained in these groups for the next three years. Teachers were assigned randomly to either group, but all were given in-service training on non-graded programs.

The children in the non-graded group moved from one reading level to the next as needed. Children in the control group participated in the conventional graded reading program. After three semesters of participation in the program, students in the non-graded group scored significantly higher than the students in the traditional graded program on all three of the reading achievement tests administered. Because the experimental design controlled for pupil ability and differences in teaching methods, these positive results can be attributed to the organizational structure of the non-graded group.

Wiersma (1986) describes an alternative to traditional schooling designed by the Wisconsin Research and Development Center for Cognitive Learning. Individually Guided Education (IGE) programs are organized in multi-age groups with 3 to 5 teachers providing instruction for a group of 90 to 150 students, with a strong emphasis placed on the individualization of instruction. An evaluation of IGE programs indicated three unifying characteristics: teachers

teaming for instruction, shared decision-making, and programming which focuses on the instructional needs of individuals (Popkowitz, Tabachnick, & Wehlage, as cited by Wiersma, 1986). Although Wiersma provides descriptive information, there is little research evidence which supports the effectiveness of IGE as an alternative to traditional schooling.

Yarborough and Johnson (1978) conducted a study that investigated the relative effectiveness of six years of a non-graded and graded system for pupils of four intelligence levels in an elementary school setting. The non-graded school was similar to schools that provide Individually Guided Education (IGE). Students moved through the curriculum without grade level designations or report cards. The graded school was characterized by didactic instruction and grade-level curricula. The results of the study were that all students profited equally cognitively. Pupils with lower IQs appeared to benefit more in the affective domain from non-graded schooling, whereas higher IQ pupils appeared to profit more from traditional, graded schooling. The researchers recommend that a more careful examination of which types of schooling best suit the needs of different types of students is needed, rather than a continued search for one program which will meet the needs of all students.

Slavin (1988) found that non-graded plans produced positive effects on student achievement, although the results of some studies were inconsistent. A closer examination of the studies which produced inconsistent results revealed that many of the studies had taken place in laboratory schools or in systems in which the implementation of a non-graded structure had resulted in little significant change from the traditional program. In contrast, studies in regular classrooms in which a non-graded model was used generally found positive effects on student achievement.

MULTIGRADED CLASSES

In many school districts, multigraded classes exist as an alternative to the traditional graded system. As with nongraded school programs, several variations of the model exist. Some districts provide multigraded classes as an alternative only at the primary (kindergarten to second grade) level, while other districts have maintained a blend of traditional and multigraded classes at several levels. The term "multigraded classes" will be used to describe a system of instructional grouping in which students of various ages are placed together without regard to ability or achievement levels. These classes are sometimes referred to as multiaged classes or ungraded units. In general, the distinction between multigraded class assignments and

nongraded schools is that the primary class assignment in a multigraded system is a heterogeneous class, composed of students with a range of abilities as well as from several age groups. Nongraded schools usually attempt to reduce the heterogeneity of primary class assignments by grouping students according to performance level.

Way (1981) conducted a study to examine the effects of multiage grouping on achievement and self-concept. The sample was selected from three elementary schools in a suburban school district. Each school had both multiage and single-age classrooms. The Comprehensive Test of Basic Skills was used to provide achievement data, while self-concept was measured using the Piers-Harris Children's Self-Concept Scale. No significant differences were noted on the effects of classroom type on student achievement. Students in the multiage classrooms had a significantly higher mean score on the Happiness and Satisfaction factor than students in the single-age classrooms. On each of the other factors and on total self-concept, students in the multiage classrooms had slightly but consistently higher scores than students in single-age classes, but the difference was not statistically significant.

Jarvis (1989) conducted an evaluation of Project SAIL, an ungraded primary unit for children ages five to eight, located at P.S. 41, District 23, in Brooklyn, NY. The unit

consisted of 24 classes of 18 to 22 children, grouped homogeneously for reading and math and heterogeneously for all other curriculum areas. In February and June, a Child Behavior Rating Scale was administered by classroom teachers. The results indicated that children who had participated in the program showed a statistically significant improvement in social skills. On the Metropolitan Achievement testing, the mean percentile score of kindergarten children improved from the first percentile on the fall pretest to the 70th percentile on the spring posttest. For first grade students, the mean percentile score improved from the 30th percentile to the 47th percentile. No matched pretest-posttest scores were available for second or third grade students.

McCabe and Crozier (1984) describe a model of multigraded classes in the Grand Haven, Michigan public schools. In this program, students are grouped in Kindergarten to third or third to sixth grade classes; all children enter the program by choice. School officials gathered data from a parent questionnaire, a student survey, and a follow-up study of academic performance. The results indicated that students in fourth and seventh grades attained 75 to 100 percent of all objectives on the Michigan Educational Assessment Test. Program participants achieved a grade point average of 3.19 in junior high school.

Although these results appear to support the positive effects of this multigraded model, no comparative data is available for non-participants.

THE JOPLIN PLAN

The Joplin Plan was originally developed in the Joplin, Missouri school district in the 1950s as a method of regrouping students for reading instruction across grade lines. As other districts adopted this concept, many variations of the original plan were developed, resulting in programs which can be characterized as "Joplin-like". The Joplin Plan is a system of instructional grouping within a graded school structure in which students are regrouped for instruction in a specific skill area by ability, without regard to grade level or age. This plan utilizes the concept of cross-age grouping within the parameters of the graded school system. Unlike nongraded schools and multigraded class systems, the traditional grade level designations continue to be used for student placement.

Slavin (1987b) conducted a comprehensive review of the research examining the effectiveness of the Joplin Plan. Overall, the results from the fourteen studies consistently support the use of the Joplin Plan. The following examples illustrate the types of results reported by Slavin.

Halliwell (as cited by Slavin, 1987b) examined a program in which students in grades one to three were regrouped across grade levels for reading only, while remaining in heterogeneous classes the rest of the day. Considerably higher reading achievement was noted in the regrouped classes at every grade level. Nearly a .94 grade level increase was seen at the first grade level when compared to classes from the previous year.

Rothrock (as cited by Slavin, 1987b) compared reading achievement of students participating in Joplin Plan classes with students who were placed in heterogeneous classes that used within-class ability grouping. Scores of students in the Joplin classes averaged .44 grade equivalents more than scores of students in the heterogeneous classes.

DISCUSSION

Each of the three alternative methods of grouping students we have discussed meets the criteria for effective use of ability grouping as set forth by Slavin (1987b). All three programs place students into groups based on student ability in the specific skill being taught. Each program allows for student movement between groups as needed, depending on changing academic performance. Finally, the programs allow teachers to adapt instruction to the performance level and learning rate of students.

Another factor that each of the plans have in common is the underlying premise that the individual student is of primary importance in all instructional planning decisions. This is significantly different from traditional graded school systems, in which instructional planning decisions are determined largely by curriculum guidelines and grade level, rather than by the needs of individual students.

This focus on individual students provides teachers with a wider array of options to address the range of developmental levels typically found within a graded classroom. The individualized approach permits students to progress at their own rate of progress with fewer comparisons to expected student performance standards at that grade level.

Research conducted to evaluate the effectiveness of nongraded instructional groupings supports the use of this type of plan as a vehicle to meet individual needs. However, the impact of nongraded grouping yields inconsistent results when effects on student achievement are considered. While none of the studies revealed any detrimental effects, some of the studies indicated that no change was seen in student performance.

As in the research on nongraded schools, research findings on multigraded classes are limited in their support

for the use of this type of instructional grouping in order to enhance student achievement. Although gains in student achievement were reported in several studies, the research designs were quasi-experimental and the lack of a control group makes it difficult to assess the true impact of the multigraded class structure. At least one study indicated that multigraded classes had a significantly positive impact on student self-concept.

Research on the Joplin Plan has the most consistent positive results of the three alternatives presented. The program has been found to produce higher levels of student achievement when used as method for regrouping students for reading. Slavin (1987b) indicates that this may be a result of the plan's impact on increasing direct instruction time by reducing student heterogeneity in reading groups.

CONCLUSION

Overall, the research reviewed for this paper provides inconsistent support for the use of nongraded and multigraded classes over traditional grouping practices. In contrast, the use of the Joplin Plan is well-supported by research. Although the findings are inconclusive, no detrimental effects were attributed to any of the alternative plans presented and many of the studies found

some type of positive effect. Since little support for the use of ability grouping as a sole method for determining academic placement can be found in the research, educators continue to need to examine alternatives to this widely used practice.

The alternative methods discussed in this paper provide a stepping stone for teachers and administrators in the search for effective grouping practices. In many school districts, it may be more practical for teachers to determine which elements of these grouping practices they may be able to utilize in their classrooms, rather than focusing on plans which would require reorganization of the entire graded school structure. Teachers may wish to evaluate the methods they currently use to group students within their classes and begin to examine alternative approaches. They might consider establishing flexible skill groups within their classroom, team-teaching at or across grade levels, and other practices which increase their options for changing instructional groupings to meet the needs of individual students.

RECOMMENDATIONS FOR FURTHER RESEARCH

As many of the studies reviewed for this paper were descriptive or theoretical, the results of the research must be loosely interpreted and have limited generalizability to

other school settings. Several of the studies describe the program as implemented in a single school; other studies provided insufficient information regarding the instructional practices actually utilized in the various grouping methods. More research is needed in order to assess the impact alternative grouping practices have on student achievement, self-concept and school climate.

In order to assess the effectiveness of alternative grouping practices, a combination of descriptive and experimental research is needed. Studies must examine the impact alternative grouping practices actually have on classroom instruction in order to allow researchers to separate out the effects of various program components. For example, a change in classroom grouping practices may alter the teacher's approach to whole-group instruction or the pattern of student interaction; research which focuses on making distinctions among the effects of several variables would provide valuable information about effective grouping practices.

In-depth case studies would provide more complete descriptions of the effects each type of alternative grouping practice has on the entire school environment. Such studies would allow researchers to assess the impact of different aspects of program implementation, from teacher selection and inservice training to instructional techniques

and student outcomes. Detailed descriptions of these programs would enable educators in other settings to replicate the most effective models of instructional grouping.

In order to increase generalizability of the research findings and to allow comparisons among alternative programs, it would be desirable to conduct in-depth case studies in schools which represent a variety of school districts across geographic locations. Finally, longitudinal studies of students who have experienced alternative instructional groupings in their education are needed in order to assess the long range impact of these grouping practices.

REFERENCES

Connell, D. R. (1987). The first thirty years were the fairest: Notes from the kindergarten and ungraded primary. Young Children, 42, 5, 30-39.

Cuban, L.(1989). The "at-risk" label and the problem of urban school reform. Phi Delta Kappan, 70, 10, 780-801.

Dufay, F. (1966). Ungrading the elementary school. West Nyack, NY: Parker.

Fogarty, M. F. (1982). A multiple-progress plan for the small school. (ERIC Document Reproduction Service No. ED 229 184).

Friedman, J. & Koeppel, J. (1990). Pre-K and first grade children: Partners in a writing workshop. Young Children, 45, 4, 66-67.

Goodlad, J. & Anderson, R. (1959). The nongraded elementary school. New York: Harcourt, Brace & World.

Hillson, M., Jones, C., Moore, W. & Van Devender, F. (1964). A controlled experiment evaluating the effects of a non-graded organization on pupil achievement. Journal of Educational Research, 57, 10, 548-550.

Hopkins, D., Oldridge, A., Williamson, M. (1965). An empirical comparison of pupil achievement and other variables in graded and non-graded classes. American Educational Research Journal, 2, 207-215.

Jarvis, C. H. (1989). Project SAIL, 1987-88, OREA Evaluation Section Report. New York, NY. (ERIC Document Reproduction Service No. ED 313 173).

Kaufhold, J. (1981). Back to basics mania--Is it hurting our schools? New York, NY. (ERIC Document Reproduction Service No. ED 202 796).

Kulik, C. & Kulik, J. (1982). Highlights from research on ability grouping. Alexandria, VA. (ERIC Document Reproduction Service No. ED 232 293).

Levenson, S. (1979). Ability grouping in the schools: A national phenomenon. (ERIC Document Reproduction Service No. ED 182 823).

Lewis, J. (1969). A contemporary approach to nongraded education. West Nyack, NY: Parker.

Maxwell, L. (1986). Making the most of ability grouping. Washington, DC. (ERIC Document Reproduction Service No. ED 280 888).

McCabe, J. & Crozier, J. (1984). The open classroom is alive and well. Principal, 64, 2, 48-49.

Miller, R. (1967). The nongraded school: Analysis and study. New York: Harper & Row.

Murray, E. & Wilhour, J. (1971). The flexible elementary school: Practical guidelines for developing a nongraded program. West Nyack, NY: Parker.

Nachbar, R. R. (1989). A K/1 class can work-wonderfully! Young Children, 44, 5, 67-71.

Oberlander, M. T. (1989). A nongraded, multiaged program that works. Principal, 68, 5, 29-30.

Pratt, D. (1983). Age segregation in schools. (ERIC Document Reproduction Service No. ED 231 038).

Slavin, R. E. (1988). Synthesis of research on grouping in elementary and secondary schools. Educational Leadership, 46, 9, 67-76.

Slavin, R. E. (1987a). Ability grouping and its alternatives: Must we track? American Educator, 11, 2, 32-48.

Slavin, R. E. (1987b). Ability grouping and student achievement in elementary schools: A best-evidence synthesis. Review of Educational Research, 57, 3, 293-336.

Tyler, L. E. (1985). A proposal for reorganizing American public education. (ERIC Document Reproduction Service No. ED 290 224).

Way, J. W. (1981). Achievement and self-concept in multiage classrooms. Educational Research Quarterly, 6, 2, 69-75.

Weaver, R. L. (1989) Separate is not equal. Principal, 68, 1, 40-42.

Wiersma, W. (1986). Individually guided education: An alternative form of schooling. (ERIC Document Reproduction Service No. ED 274 421).

Yarborough, B. & Johnson, R. (1978). Relationship between intelligence levels and benefits from innovative, non-graded elementary schooling and traditional, graded schooling. Educational Research Quarterly, 3, 2, 28-38.